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# Sketch Worth, Catch Dreams, Be Fruity

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**Prologue: A Short Pod Cast**

To connect, or not connect: this is my Pod Cast.  
Whether 'tis wiser in design to hope that  
Cool stuff in use brings sweet user experiences,  
Or to reflect amidst a sea of options,  
And through bridging, span them all. To bridge: to doubt  
No more; and by our bridges to forsake  
The head-ache of a thousand "well it depends"  
That CHI is heir to, 'tis an abnegation  
Devoutly to be ditch'd. To bleat "depends";  
"Depends": perchance to say "aye": there's surprise!  
For o'er design's bridges what dreams may come,  
Connecting people with technologies.  
That gives us cheer: there's art and craft  
That charms fecundity from barren bytes.

[exit MacBuff with iPod nanonanonay]

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**Abstract**

This Design Theatre uses method acting: we act out a method. It is didactic theatre: we must sketch designing, not just designs. We *act out* a sketching process to make maps that we can later *act on*.

**Keywords**

Worth Sketches and Maps, Materials, Features, Qualities, User Experiences, Worthwhile Outcomes.

**ACM Classification Keywords**

H5.m. Information interfaces and presentation.

**Act 1: The Importance of Knowing Purpose**

I dislike arguments of any kind. They are always vulgar, and often convincing.

Lady Bracknell in *The Importance of Being Earnest*

What's it all about, Design? Is it just for the moment we craft? What's it all about when you sort it out, Design? Are we meant to take more than we give? Hal David's lyrics actually directed questions at a certain Alfie, not at Design, and doubtless Lady Bracknell too would avoid questioning design purpose. CHI might welcome her with open arms to repress futile vulgar arguing and its consequent risk of convincement.

Design thinkers think differently. For Clement Mok, the generic *purpose* of all design is to "create meaningful connections among people, ideas, art, and technology,

### Human Sensitivities

1. People, and some plants/pets get cold.
2. Rising environmental concerns/awareness
3. Carbon footprints and offsets guide concrete individual action
4. People go out irregularly
5. People's plants and most pets stay in
6. Rising UK internet use
7. Pressure on most household budgets
8. Rooms get used differently
9. Human need for comfort/avoidance of physical discomfort
10. Aversions to unwell/dead people, plants and pets
11. Aversions to burst pipes and damp homes
12. Aversions to adding to global warming
13. Household aversion to financial hardship

shaping the way people understand their relationships with ... new products" [1]. For Stefano Marzano "Design is a connector, a synthesizer, and a translator. It's a bridge between changes in the economy, in technology, and in industry" [2]. Both characterisations (of design and its purpose) have in common the idea of connecting or bridging as being central to design. If we accept such positions, we must broaden our view of design beyond conceptualisation and creation of artefacts. Instead design creates a trio of (i) artefacts, (ii) possibilities for human value in the world, and (iii) most importantly, credible associations between (i) and (ii). If aging Lady Bracknell and her ilk don't like this, then they will have an argument on their hands. If not, they can learn how to design the sort of nice things that Eddie Carbone wanted for his niece.

### Act 2: A View on the Bridge's Piers

I want you to be with different kind of people. I want you to be in a nice office ... in one of them nice buildings. Eddie Carbone in *A View from the Bridge*

Eddie Carbone knows what he wants for his niece Katie, even when she did not want it herself. He could have been a good designer if he had not moved away from the waterfront (actually, had he lived long enough, a design studio would have opened in a neighbouring Manhattan waterfront loft conversion).

To connect between people and technologies with art and ideas, we need to be sensitive to what people value and what technology can offer. Such sensitivities form opposite piers that we must bridge between. While Lady Bracknell loved the "delicate exotic fruit" of ignorance, designing does best when it is best informed.

For didactic purposes, our Acts of designing focus on a nice new form of British central heating controller with nice features using some nice networking and sensing. The plot is driven by the sensitivities to nice and nasty things for humans (see box to left). The plot forms initially around a cast of the following technical sensitivities.

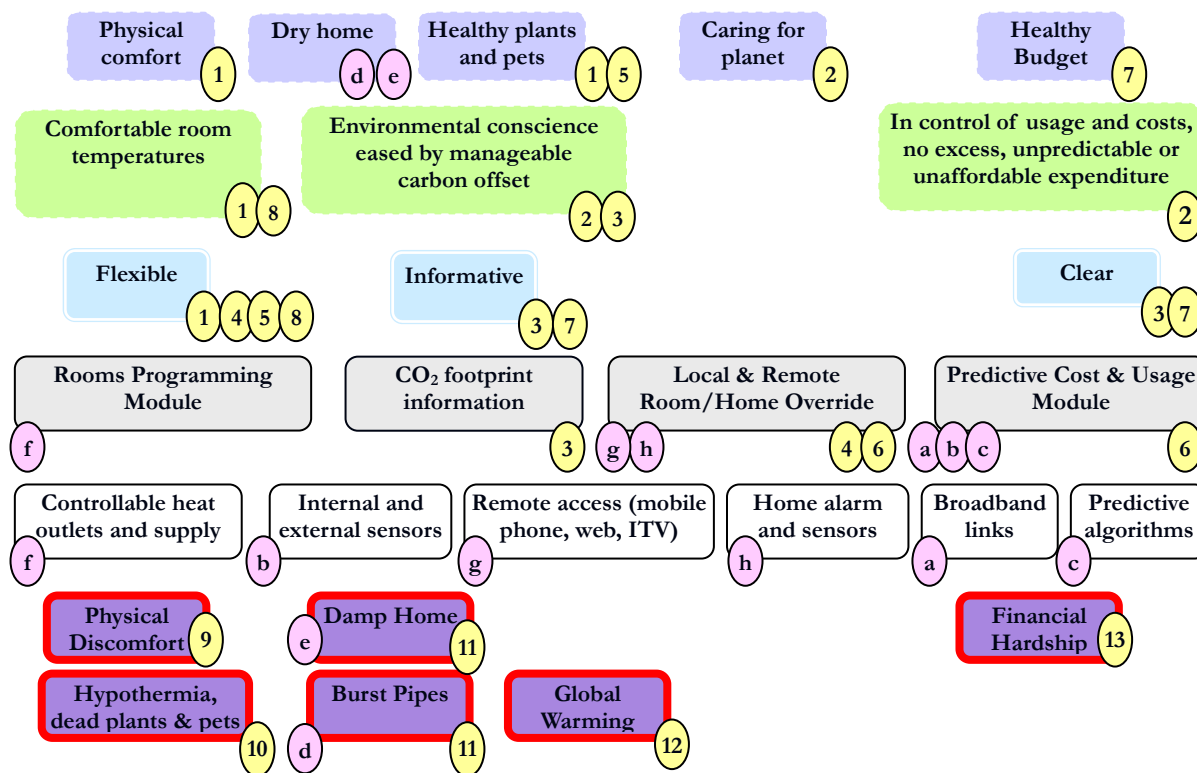
- a. Broadband links to energy utilities and their high quality weather forecast information.
- b. Monitoring can build a model of a home's energy efficiency (needs external and internal sensors)
- c. Predictive 'intelligent' software
- d. Water-based systems can freeze
- e. Houses can get damp
- f. Heat outlets and supply can be controlled
- g. Remote access via mobile phones, web and interactive TV access
- h. Home alarm systems and their sensors

The hero of the story must form two bridge piers from these groups of distinct sensitivities and then bridge them. Truths alone may not be enough to span them. The hero must imagine and explore iteratively until trial usage reaches some dénouement.

### Act 3: The Sketch Man Cometh

To hell with the truth! As the history of the world proves, the truth has no bearing on anything. It's irrelevant and immaterial, as the lawyers say. The lie of a pipe dream is what gives life to the whole misbegotten mad lot of us, drunk or sober.

Larry Slade in *The Iceman Cometh*



Put that in your pipe and smoke it Scientists! Larry Slade's Syndicalist-Anarchist tendencies would have him well up for some Design Noir. Yet however systematic and scientific we can or do make designing, it all starts with a pipe dream or two. *Worth Sketches* (e.g., above) capture fleeting pipe smoke before it drifts away: dream catcher, smoke catcher, whatever.

The dénouement begins. The plot shapes up around its props of sensitivities, which shrink into little numbered egg shapes [glance up now] laid onto design and value

elements that have been formed from one or more of them (letters and numbers in the egg shapes refer back to the sensitivities lists on the previous page).

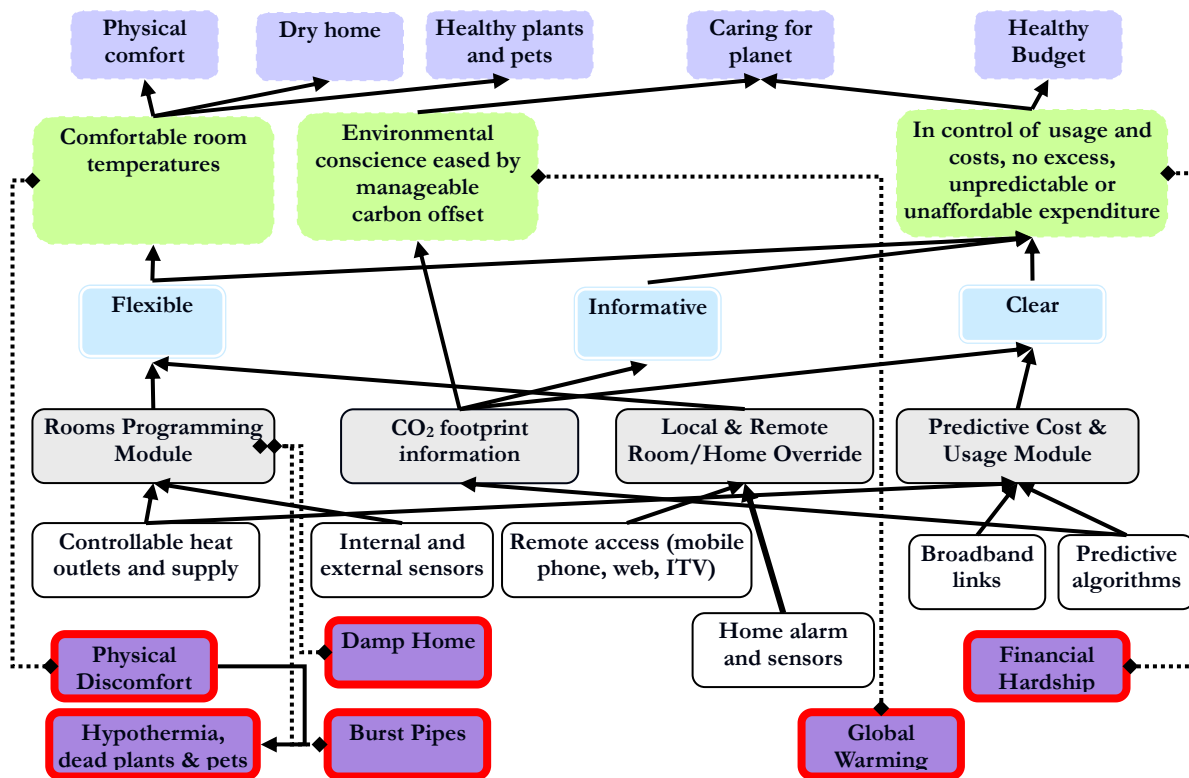
During the Design Theatre, the actor will place value and design elements, forming the sketch element by element (box by box), telling a creative story as he goes. In the worth sketch to the left, we can literally see how value stacks up. At the top are ends, that is, design purpose. These value elements are happy endings: nice houses with happy caring financially solvent occupants. At the bottom are adverse outcomes, tragic endings that we must avoid. Everything in between is a *means* to achieve or avoid some *end* (green value elements below the top are *user experiences*, blue design elements below them are *qualities*, grey ones below them are *features* and white ones above the adverse outcomes are *materials*). By showing intended value and undesirable aversions, the sketch provides a basis for assessing worth as a balance of benefits (as worthwhile outcomes at the top) and costs (including adverse outcomes at the bottom). That is why it is called a *worth sketch*.

No more spoilers for now though, all will be clear at the Design Theatre. The actor will next trace means-end chains with arrows through this worth sketch and build up dramatic tension for the final dénouement of desire triumphing over current reality.

#### Act 4: A Worth Map of Desire

I don't want realism. I want magic! Yes, yes, magic.  
I try to give that to people. I do misrepresent things.  
I don't tell truths. I tell what ought to be truth.

Blanche DuBois in *A Streetcar Named Desire*



As worth sketching moves to *worth mapping* [look up], we still make things up: not what *is*, but what *ought* to be. It is what good design does: it gets from 'a now is' through 'ought' to 'a new is'. We must pass through 'ought'. By turning much 'ought' into 'is' on the way, we thus realise the dreams captured in initial boxes and arrows. The moral of this sketching and mapping drama is that we can record Larry Slade's pipe dreams. Once recorded, we can be more systematic, even scientific, but we can relax on this and still deliver fruitful designs. It is the latter that really matters.

### Epilogue: Worth-Centred Development (WCD)

Worth maps support a systematic focus on human value in many forms: needs, wants, dreams, values and unimagined technical opportunities. Once associations between elements are mapped, the resulting boxes and arrows can be challenged from scientific, cultural and critical perspectives. The value to the "fuzzy front end" of design is the ease with which worth sketches and maps can be formed and reformed. Post-its and flip chart sheets are good draft media (better still large tables and sorting cards); drawing tools are good for tidying up, filing and sharing.

The groundedness of boxes can be challenged to expose underlying *sensitivities*. Realities behind boxes must be richly *expressed* through related design assets. There must be a *fair balance* of worth for included stakeholders. The *credibility* of arrows can be tested in means-end chain scenarios. A design's *improvability* can be assessed as the ability to systematically evaluate, understand and improve outcomes and user experiences. Do this and designs can bear fruit: in design, *commitment to subjective purpose* trumps commitment to objective truth. [The End]

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